

**SECTION 1: IDENTIFICATION****Product Identifier****Product Form:** Mixture**Product Name:** VIRWITE LIQUID (SERIES 100)**Product Code:** VIRWITE; This SDS applies to Chemtrade's VIRWITE Liquid (Series 100) Sodium Hydrosulfite products using a one or two letter prefix (A through Z) followed by a 3 digit numeric code (100 – 199) ending with the letter "L" OR "DL". For Example - VIRWITE® K-123L; VIRWITE® S-124DL; or VIRWITE® AZ-199L**Synonyms:** Sodium Dithionite; Liquid Hydro; Sodium Sulfoxylate; Dithionous Acid; Disodium Salt**Intended Use of the Product**

Reducing agent

**Name, Address, and Telephone of the Responsible Party****Manufacturer**

CHEMTRADE LOGISTICS INC.

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Suite 300

Toronto, Ontario M2H 3N5

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www.chemtradelogistics.com

**Emergency Telephone Number****Emergency Number** : Canada: CANUTEC +1-613-996-6666 / US: CHEMTREC +1-800-424-9300  
Chemtrade Emergency Contact: (866) 416-4404

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

**SECTION 2: HAZARDS IDENTIFICATION****Classification of the Substance or Mixture****Classification (GHS-US)**

Acute Tox. 4 (Oral) H302

Skin Irrit. 2 H315

Eye Irrit. 2A H319

Aquatic Acute 3 H402

Aquatic Chronic 3 H412

**Label Elements****GHS-US Labeling****Hazard Pictograms (GHS-US)** :

GHS07

**Signal Word (GHS-US)** :

Warning

**Hazard Statements (GHS-US)** :H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H402 - Harmful to aquatic life  
H412 - Harmful to aquatic life with long lasting effects**Precautionary Statements (GHS-US)** :P264 - Wash exposed areas. thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P273 - Avoid release to the environment.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P312 - If swallowed: Call a poison center/doctor if you feel unwell.  
P302+P352 - If on skin: Wash with plenty of water  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P321 - Specific treatment (see Section 4).

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362 - Take off contaminated clothing and wash before reuse.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

### Other Hazards

**Other Hazards Not Contributing to the Classification:** Not available

**Unknown Acute Toxicity (GHS-US)** Not available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Proprietary salt 2*	(CAS No) Proprietary	5 - 30	Self-heat. 1, H251 Acute Tox. 4 (Oral), H302 Aquatic Acute 3, H402 Aquatic Chronic 3, H412
Proprietary salt 3*	(CAS No) Proprietary	0.1 - 4	Eye Irrit. 2A, H319
Proprietary component*	(CAS No) Proprietary	0.1 - 2	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Aquatic Acute 3, H402

\*An exemption was claimed under the Canadian Hazardous Materials Information Review Act. The registry number assigned to the claim is 8092. The exemption was granted January 31, 2012 for those ingredients indicated.

Full text of H-phrases: see section 16

## SECTION 4: FIRST AID MEASURES

### Description of First Aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). If exposed or concerned: Get medical advice/attention.

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area.

**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

**Eye Contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Ingestion:** Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER/doctor/physician if you feel unwell.

### Most Important Symptoms and Effects Both Acute and Delayed

**General:** Harmful if swallowed. Eye irritation. Causes skin irritation. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed.

**Inhalation:** Inhalation of vapors may cause respiratory irritation.

**Skin Contact:** Causes skin irritation.

**Eye Contact:** Causes serious eye irritation.

**Ingestion:** Swallowing a small quantity of this material will result in serious health hazard.

**Chronic Symptoms:** Not available

### Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing Media

**Suitable Extinguishing Media:** Dry chemical, carbon dioxide, foam, water spray. Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use water jet. Use of heavy stream of water may spread fire.

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### Special Hazards Arising From the Substance or Mixture

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### Advice for Firefighters

**Precautionary Measures Fire:** Not available

**Firefighting Instructions:** Exercise caution when fighting any chemical fire.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Sulfur dioxide is major decomposition product. Thermal decomposition products may also include hydrogen sulfide, sodium oxide, oxides of carbon and potentially sulfur.

### Reference to Other Sections

Refer to section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not allow product to spread into the environment.

#### For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel. Evacuate unnecessary personnel.

#### For Emergency Personnel

**Protective Equipment:** Equip cleanup crew with proper protection. Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Ventilate area.

### Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

### Methods and Material for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Do not take up in combustible material such as: saw dust or cellulosic material.

**Methods for Cleaning Up:** Collect spillage. Clear up spills immediately and dispose of waste safely.

### Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

## SECTION 7: HANDLING AND STORAGE

### Precautions for Safe Handling

**Hygiene Measures:** Do not eat, drink or smoke when using this product. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

### Conditions for Safe Storage, Including Any Incompatibilities

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Store away from other materials.

**Incompatible Materials:** strong acids. Strong oxidizers.

**Storage Temperature:** 2 - 7 °C (35 - 45 °F) under nitrogen atmosphere

**Storage Area:** Keep/Store away from extremely high or low temperatures, incompatibles and direct sunlight. Store away from heat.

**Specific End Use(s)** Reducing agent

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Proprietary component		
Mexico	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
USA ACGIH	ACGIH Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
USA OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
USA NIOSH	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
USA IDLH	US IDLH (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>

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Alberta	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
British Columbia	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Manitoba	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
New Brunswick	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Newfoundland & Labrador	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Nova Scotia	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Nunavut	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Northwest Territories	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Ontario	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Prince Edward Island	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Québec	PLAFOND (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Saskatchewan	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
Yukon	OEL Ceiling (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>

### Exposure Controls

**Appropriate Engineering Controls:** Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Gloves. Protective goggles. Protective clothing.

**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical safety goggles.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: Clear
Odor	: Slight pungent
Odor Threshold	: Not available
pH	: 10 - 13.5
Melting Point	: Not available
Freezing Point	: < 0 (32 °F)
Boiling Point	: > 100 °C (>212 °F) (212.00 °F)
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: 1.12 - 1.18
Solubility	: Water: Miscible
Partition Coefficient: N-octanol/water	: < -2.75 - -4.7 Log Pow (estimated) – for sodium hydrosulfite
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

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### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Hazardous reactions will not occur under normal conditions.

**Chemical Stability:** Product is stable.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Sparks, heat, open flame and other sources of ignition. Extremely high or low temperatures.

**Incompatible Materials:** Strong oxidizers. Strong acid. Peroxides. In contact with air, mixing sodium hydrosulfite solutions with polysulfide or sulfide containing products may liberate potentially lethal Hydrogen Sulfide gas. Strong acids. Strong bases. Strong oxidizers.

**Hazardous Decomposition Products:** On heating: release of toxic and corrosive gases/vapors sulphur oxides. Carbon oxides (CO, CO<sub>2</sub>).

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

**Acute Toxicity:** Harmful if swallowed.

**LD50 and LC50 Data:**

VIRWITE LIQUID (SERIES 100)	
ATE US (oral)	500.00 mg/kg body weight

**Skin Corrosion/Irritation:** Causes skin irritation.

**pH:** 10 - 13.5

**Serious Eye Damage/Irritation:** Causes serious eye irritation.

**pH:** 10 - 13.5

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not available

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Potential Adverse Human Health Effects and Symptoms:** Harmful if swallowed.

**Symptoms/Injuries After Inhalation:** Inhalation of vapors may cause respiratory irritation.

**Symptoms/Injuries After Skin Contact:** Causes skin irritation.

**Symptoms/Injuries After Eye Contact:** Causes serious eye irritation.

**Symptoms/Injuries After Ingestion:** Swallowing a small quantity of this material will result in serious health hazard.

#### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

Proprietary salt 3	
LD50 Oral Rat	4090 mg/kg
LC50 Inhalation Rat (mg/l)	2300 mg/m <sup>3</sup> (Exposure time: 2 h)

Proprietary salt 2	
LD50 Oral Rat	2500 mg/kg
LD50 Dermal Rat	> 2000

### SECTION 12: ECOLOGICAL INFORMATION

#### Toxicity

**Ecology - General:** Harmful to aquatic life with long lasting effects.

Proprietary salt 3	
LC50 Fish 1	300 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	265 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	310 - 1220 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

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Proprietary component	
LC50 Fish 1	45.4 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	40 mg/l

Proprietary salt 2	
LC50 Fish 1	62.3 mg/l (Species :Leuciscus idus)
EC50 Daphnia 1	98 mg/l (Exposure time: 48 h - Species: Daphnia magna Straus)

### Persistence and Degradability

VIRWITE LIQUID (SERIES 100)	
Persistence and Degradability	May cause long-term adverse effects in the environment.

### Bioaccumulative Potential

VIRWITE LIQUID (SERIES 100)	
Bio-accumulative Potential	Not established.

Proprietary salt 3	
BCF Fish 1	(no bioaccumulation)

Mobility in Soil Not available

### Other Adverse Effects

Other Information: Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

**Ecology – Waste Materials:** This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

## SECTION 14: TRANSPORT INFORMATION

**14.1 In Accordance with DOT** Not regulated for transport

**14.2 In Accordance with IMDG** Not regulated for transport

**14.3 In Accordance with IATA** Not regulated for transport

**14.4 In Accordance with TDG** Not regulated for transport

## SECTION 15: REGULATORY INFORMATION

### US Federal Regulations

VIRWITE LIQUID (SERIES 100)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

Proprietary salt 3	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Proprietary component	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

Proprietary salt 2	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

### US State Regulations

VIRWITE LIQUID (SERIES 100)()	

Proprietary component	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List	
U.S. - Pennsylvania - RTK (Right to Know) List	

Proprietary salt 2	
U.S. - Massachusetts - Right To Know List	
U.S. - New Jersey - Right to Know Hazardous Substance List	

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U.S. - Pennsylvania - RTK (Right to Know) List

### Canadian Regulations

#### VIRWITE LIQUID (SERIES 100)

WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects



#### Proprietary salt 3

Listed on the Canadian DSL (Domestic Substances List)

Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 1 %

WHMIS Classification Class D Division 2 Subdivision B - Toxic material causing other toxic effects  
Class E - Corrosive Material

#### Proprietary component

Listed on the Canadian DSL (Domestic Substances List)

Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 1 %

WHMIS Classification Class E - Corrosive Material

#### Proprietary salt 2

Listed on the Canadian DSL (Domestic Substances List)

WHMIS Classification Class B Division 6 - Reactive Flammable Material  
Class F - Dangerously Reactive Material

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

## SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date : 05/03/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

### GHS Full Text Phrases:

Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Met. Corr. 1	Corrosive to metals Category 1
Self-heat. 1	Self-heating substances and mixtures Category 1
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
H251	Self-heating: may catch fire
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H402	Harmful to aquatic life
H412	Harmful to aquatic life with long lasting effects

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### Party Responsible for the Preparation of This Document

CHEMTRADE LOGISTICS, INC.

For SDS Info: (416) 496-5856

*Handle product with due care and avoid unnecessary contact. This information is supplied under U.S. OSHA'S "Right to Know" (29 CFR 1910.1200) and Canada's WHMIS regulations. Although certain hazards are described herein, we cannot guarantee these are the only hazards that exist. The information contained herein is based on data available to us and is believed to be true and accurate but it is not offered as a product specification. No warranty, expressed or implied, regarding the accuracy of this data, the hazards connected with the use of the product, or the results to be obtained from the use thereof, is made and Chemtrade and its affiliates assume no responsibility. Chemtrade is a member of the CIAC (Chemistry Industry Association of Canada) and adheres to the codes and principles of Responsible Care™.*



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